Attorney Docket No. 9536-3 Application No.: 10/623,930

Filed: July 21, 2003

Page 2 of 13

Listing of Claims:

- 1. (Withdrawn Currently amended) A method for producing the plant of claim 20modulating the expression of a first target sequence in a plant cell to produce a plant or plant cell stably transformed with an miRNA precursor construct, said method comprising transforming saida plant cell with an miRNA precursor construct, said construct comprising a promoter functional in a plant cell, wherein the promoter is operably linked to a nucleotide sequence encoding an isolated plant miRNA precursor, said plant miRNA precursor having comprising an exogenous miRNA sequence incorporated into the plant miRNA precursor that replaces an endogenous miRNA sequence and a strand opposite the exogenous miRNA sequence, wherein
- (a) the <u>exogenous</u> miRNA <u>sequence</u> is modified as compared with the miRNA sequence endogenous to said isolated plant miRNA precursor, the modifications maintaining maintains the length of the endogenous miRNA <u>sequence</u>; and
- (b) <u>the strand opposite the exogenous miRNA sequence in the isolated plant miRNA</u> precursor is modified to <u>maintaincorrespond to the modifications made in the miRNA</u>, the <u>modifications to the plant miRNA precursor maintaining</u> the secondary structure of the plant miRNA precursor including double strandedness and any mismatches,

and further wherein[[,]] the <u>modifiedexogenous</u> miRNA sequence is complementary to and hybridizes with a target nucleotide sequence within said plant, whereby the expression of the target sequence is reduced.

- 2. (Withdrawn-Currently amended) The method of claim 1, wherein said first target sequence is an endogenous plant sequence.
- 3. (Withdrawn-Currently amended) The method of claim 1, wherein said first target sequence is an exogenous sequence.
- 4. (Withdrawn-Currently amended) The method of claim 1, wherein said first target sequence is selected from the group consisting of genes involved in the synthesis and/or degradation of proteins, peptides, fatty acids, lipids, waxes, oils, starches, sugars, carbohydrates, flavors, odors, toxins, carotenoids, hormones, polymers, flavinoids, storage proteins, phenolic acids, alkaloids, lignins, tannins, celluloses, glycoproteins, and glycolipids.

Attorney Docket No. 9536-3 Application No.: 10/623,930

Filed: July 21, 2003

Page 3 of 13

5. (Withdrawn-Currently amended) The method of claim 1, wherein said first promoter is selected from the group consisting of a constitutive promoter, tissue-preferred promoter, and an inducible promoter.

6-19. (Canceled).

- 20. (Currently amended) A plant stably transformed with an miRNA precursor construct, said miRNA precursor construct comprising a promoter functional in a plant cell, wherein the promoter is operably linked to a nucleotide sequence encoding an isolated plant miRNA precursor, said plant miRNA precursor having comprising an exogenous miRNA sequence incorporated into the plant miRNA precursor that replaces an endogenous miRNA sequence and a strand opposite the exogenous miRNA sequence, wherein
- (a) the <u>exogenous</u> miRNA <u>sequence</u> is <u>modified as compared with the miRNA</u> sequence endogenous to said isolated plant miRNA precursor, the modifications maintaining maintains the length of the endogenous miRNA <u>sequence</u>; and
- (b) the strand opposite the exogenous miRNA sequence in the isolated plant miRNA precursor is modified to maintain correspond to the modifications made in the miRNA, the modifications to the plant miRNA precursor maintaining the secondary structure of the plant miRNA precursor including double strandedness and any mismatches,

and further wherein[[,]] the <u>modifiedexogenous</u> miRNA <u>sequence</u> is complementary to and hybridizes with a target nucleotide sequence within said plant, whereby the expression of the target sequence is reduced.

21-22. (Canceled).

23. (Currently amended) A plant cell stably transformed with an miRNA precursor construct, said miRNA precursor construct comprising a promoter functional in a plant cell, wherein the promoter is operably linked to a nucleotide sequence encoding an isolated plant miRNA precursor, said plant miRNA precursor having comprising an exogenous miRNA sequence incorporated into the plant miRNA precursor that replaces an endogenous miRNA sequence and a strand opposite the exogenous miRNA sequence, wherein

Attorney Docket No. 9536-3 Application No.: 10/623,930

Filed: July 21, 2003

Page 4 of 13

- (a) the <u>exogenous</u> miRNA <u>sequence</u> is <u>modified as compared with the miRNA</u> sequence endogenous to said isolated plant miRNA precursor, the modifications maintaining <u>maintains</u> the length of the endogenous miRNA <u>sequence</u>; and
- (b) the strand opposite the exogenous miRNA sequence in the isolated plant miRNA precursor is modified to maintaincorrespond to the modifications made in the miRNA, the modifications to the plant miRNA precursor maintaining the secondary structure of the plant miRNA precursor including double strandedness and any mismatches,

and further wherein[[,]] the <u>modifiedexogenous</u> miRNA<u>sequence</u> is complementary to and hybridizes with a target nucleotide sequence within said plant, whereby the expression of the target sequence is reduced.

24-25. (Canceled).

26. (Original) Transformed seed of the plant of claim 20.